[0048] In this aspect, the display apparatus **100** may be embodied as any of various types of electronic devices, such as a TV, e-board, e-table, a large format display (LFD), a smartphone, a tablet, a desktop PC, and a notebook. In particular, the display according to an exemplary embodiment may be connected through the set-top box, HDMI, and UART, and the display apparatus which is connected to the set-top box through each of an HDMI and a UART communication method can be included.

[0049] In addition, the display apparatus **100** may receive contents from the set-top box connected using the HDMI and the UART communication method and provide the same to a viewer. In particular, the display apparatus **100** may receive a video signal and an audio signal relating to contents from the set-top box through HDMI communication, communicate with the set-top box through UART communication, and receive a control command.

[0050] The first input port **110** may receive information relating to an external device. In this aspect, the external device includes an electronic device which exists outside the display apparatus **100**, may perform communication with the display apparatus **100** through wireless and/or wired communication methods, and transmit contents or a control command to the display apparatus **100**. For example, the external device according to an exemplary embodiment may be embodied mainly as a set-top box.

[0051] In particular, information regarding the external device may include information that relates to at least one of a manufacturer of the external device, a name of the external device, and a product group that relates to the external device.

[0052] More particularly, information regarding the manufacturer of the external device may include information regarding a name of the manufacturer. For example, when the manufacturer of the external device is "Samsung Electronics," information regarding the manufacturer of the external device may include information regarding a name of the manufacturer, such as, for example, "SAMSUNG."

[0053] In addition, information regarding a name of the external device may include information regarding a model name of the external device or information regarding a name of manufacturing used for manufacturing of the external device. For example, information regarding a name of the external device can be indicated such as "BD-P1600", or a device type including a manufacturing serial number of the external device.

[0054] In addition, information that relates to the product group of the external device may include information indicating which type of electronic device the external device belongs to. For example, the information that relates to the product group of the external device may include whether the external device corresponds to a DVD player, a game console, or Blue-ray disk device, or the like.

[0055] In addition, information that relates to the external device may include various information including information relating to supportable image quality or resolution supportable by the external device and information that relates to settings of the external device, in addition to the information of the manufacturer of the external device, a name of the external device, and a product group of the external device.

[0056] Further, as an example, the aforementioned first input port may be configured in accordance with a specification of a high definition multimedia interface (HDMI), and the external device connected to the first input port may be a HDMI-supportable electronic device that is connectible with the display apparatus **100** via the HDMI.

[0057] In this aspect, HDMI refers to one of the interface specifications which can transmit non-compressed digital video and audio signals in an integrated manner, and this is a well-known art which will not be further described.

[0058] Further, the second input port **120** may be used to facilitate communication with the external device and may be configured to receive a control command.

[0059] Herein, the second input port may be an input port which uses a UART (Universal Asynchronous Receiver Transmitter) communication method. The UART may perform functions such as converting and/or recovering parallel data to series bit stream; adding parity bits; detecting or removing parity; and/or adding and deleting a start bit and a stop bit for non-synchronized communication. Such UART devices, generally, may be used in accordance with communication standards such as RS-232, RS-422, and RS-485.

[0060] Accordingly, the display apparatus **100** may communicate with the external device via the second input port **120**, and receive a control command to control the display apparatus **100** from the external device. For example, when a user sends a control signal that relates to a channel change or a volume change of the display apparatus **100** to the external device via a remote controller, the external device may send a control command for the channel change or the volume change of the display apparatus **100** to the display apparatus **100** via the second input port **120** of the display apparatus **100**.

[0061] In addition, the display apparatus **100** may perform communication with the external device via the second input port **120** and transceive preset data, and for example, the display apparatus **100** may transceive channel information by performing communication with the external device via the second input port **120**.

[0062] In addition, the processor **130** may automatically select a communication protocol of the second input port **120** based on information relating to the external device received via the first input port **110**, and control to communicate with the external device via the second port **120** by using the selected communication protocol.

[0063] In particular, the processor **130**, based on the information that relates to the external device that is received via the first input port **110**, may identify the external device, and select a communication protocol required for communicating with the external device via the second input port **120**. In this aspect, a required communication protocol may be selected based on information relating to the external device, and such a communication protocol may be individually compatible with the external device. That is, when the external device changes, the communication protocol required for the display apparatus **100** to communicate with the external device via the second input port **120** may change.

[0064] In particular, the processor **130** may automatically select the communication protocol of the second input port **120** necessary for communicating with the external device based on information that relates to the manufacturer of the external device, the name of the external device, and the product group of the external device.

[0065] For example, a lookup table within which a communication protocol corresponding to at least one of the